

# Bat Emergence Survey Report

**St Mary with St Ethelbert Church, Luckington**

16<sup>th</sup> May 2025, 8.00pm – 10.30pm

**Malmesbury and District Natural History Society**

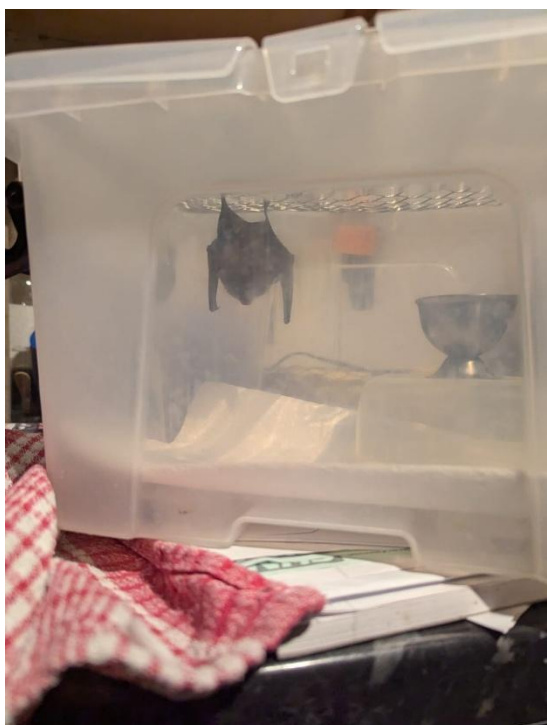


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## Introduction



*This is the Lesser horseshoe bat found in Luckington*

Last summer Malmesbury and District Natural History Society (MDNHS) was contacted by a Luckington resident who had found a wounded bat in her kitchen. The bat was taken to a bat care specialist who identified it as a rare Lesser horseshoe bat and a juvenile one at that. The fact that it was juvenile is significant because that means it was probably born not far away. MDNHS was keen to see if Luckington church was the location of an, as yet unknown, Lesser horseshoe bat maternity roost.

The lady's home is adjacent to Luckington Church. Her property did not provide the right conditions for Lesser horseshoe bats to live in but the church appeared to have a tower with open access which the bats could fly straight

into in order to roost. Therefore, MDNHS asked for permission to carry out a 'Sunset Survey' in the church grounds to test the theory.

It is evident that bats are present in the church due to the droppings left but there is no indication what bats these are or where they are roosting.

Since we have started looking into reports of bats in Luckington we have also found that another resident found a Brown long-eared bat in her garden last year so we are hoping we might find evidence of these too.

## Why carry out a 'Sunset Survey'?

MDNHS chose to carry out a 'Sunset Survey', part of the Bat Conservation Trust's National Bat Monitoring Programme (NBMP), partly because no experience is required to carry out this survey.

***"Are you looking for something to do with your friends and family in your local area this spring/summer/autumn?"***

***The Sunset Survey (April - October) brings you a perfect opportunity to get together with family/friends and discover bats and other wildlife in your local area. This is ideal for you if you don't have previous bat surveying experience. Just spend an hour from sunset (or before sunrise) and let us know what you see/hear from your window, balcony, garden or local green space."***

This seemed ideal as, although some of the volunteers on the evening have some experience of bat surveys, most people did not and were there to enjoy the evening and learn about the subject. Other, more detailed NBMP surveys outlined by the Bat Conservation Trust, require two surveys on different dates which this one-off survey would not comply with.



## Survey Approach on the Night

Twenty-two people were present on the night; two members of the MDNHS Committee ran the evening with the remaining twenty being volunteers.

Initially the group walked around the church looking for places where bats might emerge from the church including holes in the walls, raised tiles and the tower itself. Then the people were split into five groups and were positioned around the churchyard to ensure that the church tower could be seen from all directions.

Each group was given bat detectors to ensure that all areas were covered. Equipment used included:

- Magenta Heterodyne
- Apodemus PippyG
- 'Griff' detectors (made by Phil Atkin)
- Echo Meter Touch

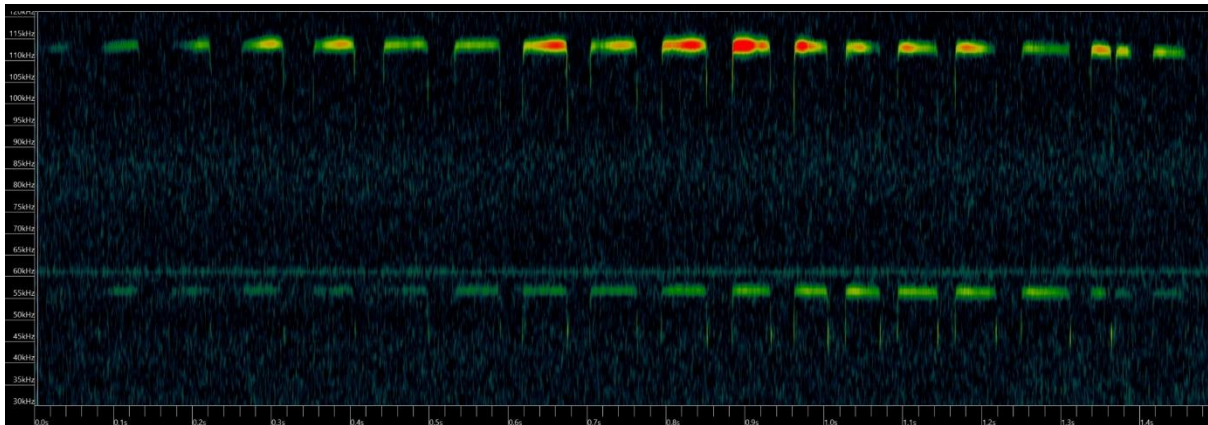
Late in the evening the whole group left the churchyard to see if there were any bats to be found along Hancock's Well Spring. Daubenton's bats were easily seen skimming the surface of the water with the help of a torch. All data recorded on the night was then analysed afterwards with the help of the BTO Acoustic Pipeline.

## Results

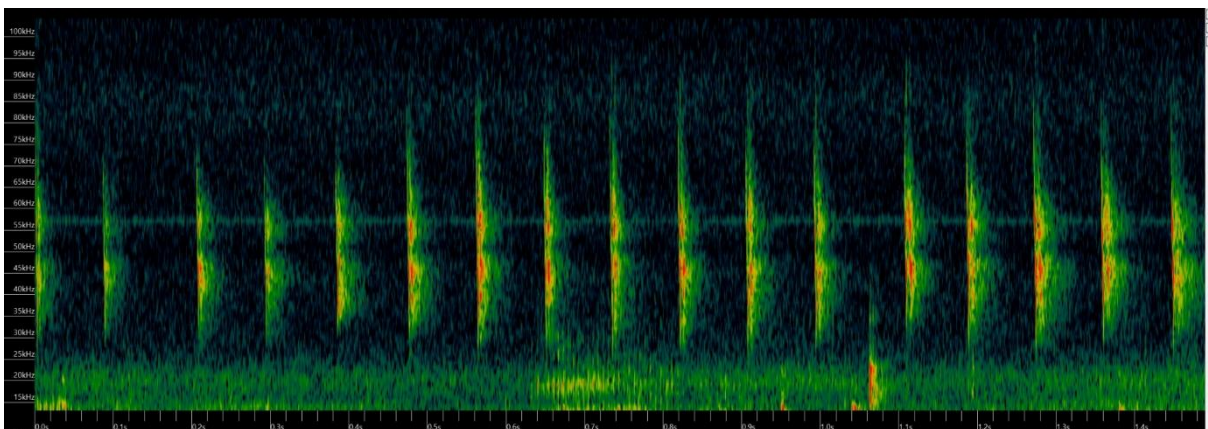
Following analysis of the data MDNHS can state with a good degree of confidence that the following bats were detected on the night of the survey:

- Barbastelle
- Brown long-eared
- Common Pipistrelle
- Daubenton's
- Lesser horseshoe
- Serotine
- Noctule

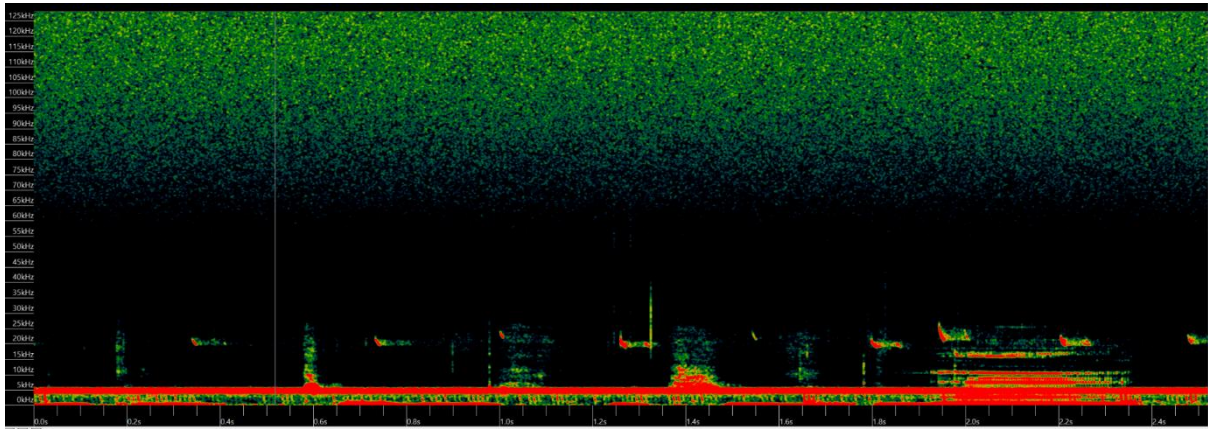
Some of these bats; the Barbastelle and Lesser horseshoe, are very rare bats. Results with supporting evidence was submitted to the Bat Conservation Trust.



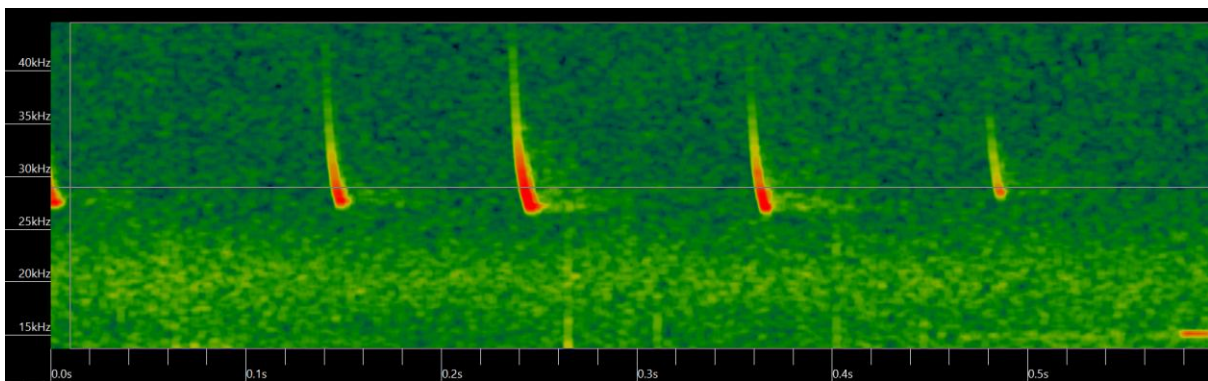
*Lesser horseshoe bat echolocation*



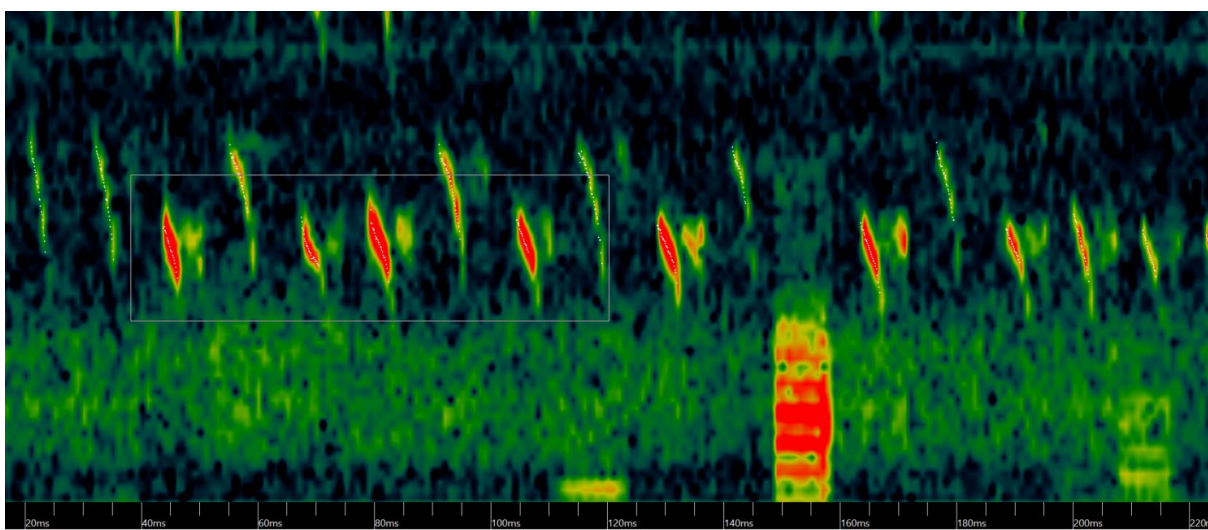
*Daubenton's bat echolocation*



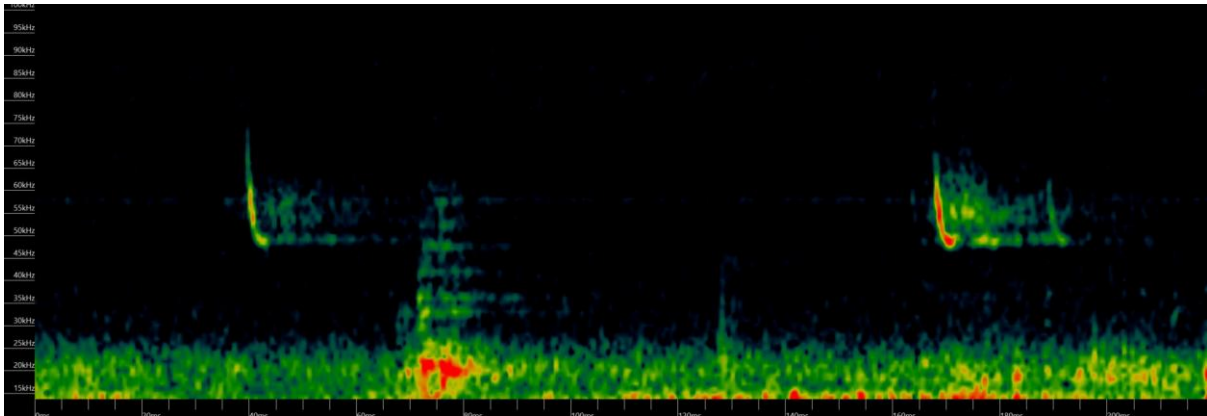
Noctule echolocation



Serotine echolocation



Barbastelle echolocation



*Common pipistrelle echolocation*

## Conclusion

It is important to note that this survey was only a snapshot of bat activity. It took place on one evening and therefore is merely a sample of what bats are active in and around Luckington church. To fully identify the bats that are living in the area more surveys would be required over a longer period of time, in compliance with the Bat Conservation Trust's survey guidelines.

Equipment such as thermal imaging and infra-red cameras could also be deployed to confirm any roost emergence from the church over the course of a night, as it can be difficult to identify bats emerging once it is dark.

It is also important to note that the people taking part in the survey are not professional bat ecologists. Again, to be completely secure in knowing what bats are present in the church or wider area a professional survey would be advisable.

However, MDNHS is confident that the bats listed in this report were present on the night of the survey and despite watching the church closely to see if any bats emerged from it, at no time were bats seen flying out of the church tower or the walls of the church. Jennifer Crees of MDNHS inspected the cellar of the church as this was a likely location for bats to roost in but there was no signs of bats using this area.

Where the Lesser horseshoe bat maternity roost remains a mystery. It seems unlikely that the church is the location for this as the number of Lesser horseshoe bats was not high enough to support this. It is still probable that there may be a maternity roost nearby but which property they are located in is unknown.

**Thank you!**

We would like to give St Mary with St Ethelbert Church a huge thank you for allowing us to carry out this survey on their grounds. It was a wonderful evening and the bats that were found to be present have added to the knowledge of bats living in the area.